

Department of Energy

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JAN 16 2007

Mr. James A. Saric, Remedial Project Manager United States Environmental Protection Agency Region V-SRF-5J 77 West Jackson Boulevard Chicago, Illinois 60604-3590

Mr. Thomas Schneider, Project Manager Ohio Environmental Protection Agency Southwest District Office 401 East Fifth Street Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

TRANSMITTAL OF RESPONSES TO THE ADDITIONAL OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENTS AND CHANGES TO THE FINAL CERTIFICATION REPORT FOR THE AREA 6 GENERAL AREA WEST

- References: 1) Letter DOE-0031-07, J. Reising to J. Saric/T. Schneider, "Transmittal of the Draft Certification Report for Area 6 General Area West," dated October 25, 2006
 - 2) Letter, J. Saric to J. Reising, "Area 6 General Area West Certification Report," dated November 8, 2006
 - 3) Letter DOE-0064-07, J. Reising to J. Saric/T. Schneider, "Transmittal of Responses to U.S. Environmental Protection Agency Comments on the Draft Certification Report for Area 6 General Area West," dated November 14, 2006
 - 4) Letter, J. Saric to J. Reising, "Area 6 General Area West Certification Report Response to Comments," dated November 29, 2006
 - 5) Letter, T. Schneider to J. Reising, "Disapproval Draft Certification Report for Area 6 General Area West," dated November 29, 2006

EMCBC-00201-07

Mr. Schneider

- 6) Letter DOE-0091-07, J. Reising to J. Saric/T. Schneider, "Transmittal of Responses to Ohio Environmental Protection Agency Comments on the Final Certification Report for Area 6 General Area West, Revision 0," dated December 12, 2006
- 7) Letter, T, Schneider to J. Reising, "Comments Response to Comments on the Certification Report for the Area 6 General Area West," dated January 3, 2007

Enclosed for your approval are responses to the additional Ohio Environmental Protection Agency (OEPA) comments and change pages to the final Certification Report for Area 6 General Area West. All comment responses have been incorporated into the change pages of the final report. U.S. Environmental Protection Agency (US EPA) has approved the response to their comments as noted in reference 4.

If you have any questions or require additional information, please contact me at (513) 648-3139.

Sincerely,

Johnny Rossing

Director

Enclosures

cc with enclosures:

J. Desormeau, DOE-OH/FCP

T. Schneider, OEPA-Dayton (three copies of enclosures)

G. Jablonowski, USEPA-V, SRF-5J

M. Cullerton, Tetra Tech

M. Shupe, HSI GeoTrans

S. Helmer, ODH

AR Coordinator, Fluor Fernald, Inc./MS12

cc w/o enclosures:

- F. Johnston, Stoller, Inc.
- F. Miller, Fluor Fernald, Inc.
- P. Mohr, Fluor Fernald, Inc.
- T. Terry, Fluor Fernald, Inc.

RESPONSES TO THE OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENTS ON THE FINAL REVISION 0 CERTIFICATION REPORT FOR THE AREA 6 GENERAL AREA WEST

FERNALD CLOSURE PROJECT FERNALD, OHIO

JANUARY 2007

U.S. DEPARTMENT OF ENERGY

RESPONSES TO OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENTS ON THE FINAL CERTIFICATION REPORT FOR THEAREA 6 GENERAL AREA WEST (20600-RP-0009, REVISION 0)

Specific Comments:

1. Commenting Organization: Ohio EPA Commenter: OFFO

Section #: 5.1 Pg #: 5-1 Line #: Code: C

Original Comment #: 16

Comment: Text states "Arsenic in CU01 fails the 90%UCL and hotspot criteria" and that the CU

will not be remediated because it is above the maximum soil background value. The text should reference the appropriate documentation or discussions with Ohio EPA/US EPA that support the decision to allow the arsenic to remain in place unremediated, even this constituent exceeds the soil FRL. The text does not sufficiently justify leaving this area

unremediated.

Response: Agree.

Action: The Utilities portion of this section will be revised to read:

"UTILITIES

During utility removal, samples were collected from the bottom of the trenches to certify the soil footprint under the utilities. The data were partitioned into nine CUs, as shown on Figures 2-7 through 2-10 and Figure 2-12.

Two Utility CUs, CU02 and CU03, did not have any FRL exceedences. Seven Utility CUs, CU01 and CU04 through CU09, had FRL exceedences; CU01 had exceedences for total uranium and arsenic, CU04 had a radium-226 exceedence, CU05 had exceedences for radium-226 and arsenic, CU06 had a total uranium exceedence, CU07 had exceedences for radium-226 and arsenic, CU08 had exceedences for arsenic and beryllium, and CU09 had exceedences for arsenic.

All of the CUs pass certification with the exception of arsenic in utility trench CU01. The secondary COC arsenic in CU01 fails the hotspot criterion, the a posteriori test, and the 90 percent UCL on the mean criterion. However, the failing condition relative to the UCL on the mean is due to the contribution from the single hot-spot sample value of 40.4 mg/kg. Without the contribution of this sample point, the 90% UCL on the mean is 10.1 mg/kg where the FRL is 12 mg/kg, which allows for the consideration to remove this hot-spot. However, the hot-spot sample point is located at the base of a backfilled utility trench, which significantly diminishes the exposure scenarios as utility trenches were at least 2 to 3-feet deep prior to backfill. The utility trenching process is described in the approved V/FCN to the Project Specific Plan Guidelines for General Characterization For Sitewide Soil Remediation (variance 20300-PSP-0011-03) that was submitted in December 2005. Based on this variance, the overburden soil associated with the utilities that was below the designed contamination grade was precertified by scanning the surface above the utility along with an adjacent area that is wide enough to stage the overburden soil. Once precertified, the overburden was excavated down to the top of the utility

and staged on the adjacent precertified footprint. After the utility was removed, the bedding was scanned and removed as well. The native soil beneath the bedding was scanned and demonstrated to be within acceptable limits. Subsequently, the native soil at the base of the trench was sampled and the trench was backfilled-at-risk with the precertified overburden soil that was staged adjacent to the trench. The real time scan was used to show that there was no radiological contamination present, therefore it was unlikely that any non-radiological contamination was present. However, in this case, a single arsenic value was reported at a value greater then twice its FRL.

A risk assessment was performed to verify that leaving this hot-spot un-remediated does not increase the risk beyond the acceptable levels. The results of this assessment indicated that the ILCR results are less than 10⁻⁴. This risk assessment is further explained in Section 5.2 and Appendix E.

Furthermore, based on the Addendum to the CERCLA/RCRA Background Soil Study, arsenic levels in the subsurface are typically higher than at the surface in this area. Therefore, as described in the addendum to the SEP, the subsurface utility trench data were compared, on a population-to-population basis, to background levels established in the Addendum to the CERCLA/RCRA Background Soil Study. These statistics, which produced a 95% Confidence Interval on the Mean for the utility trench samples of 6.878 through 8.261 mg/kg and a 95% Confidence Interval on the Mean for the background samples of 6.733 through 7.875 mg/kg, show nearly a complete overlap and demonstrate that the levels of arsenic in the subsurface utility trenches are consistent with the area background conditions

Based on this information, the elevated condition relative to arsenic in the certification unit does not warrant further remediation. This approach is consistent with SEP protocols, specifically Section 3.4.6 Implementation Strategy for the Hot Spot Criteria where it states, "In general a decision on the need for further excavation of secondary COCs will be made with regulatory concurrence on a case-by-case basis."

The data and statistical evaluations are presented in Appendix B."

2. Commenting Organization: Ohio EPA Commenter: OFFO

Section #: Appendix A.1 Pg #: A.1.62 Line #: Code: C

Original Comment #: 18

Comment: The units listed for BSL-C02 Total Uranium have not been corrected. The table shows "mg/kg" and not "ug/g." Please correct the units for consistency.

Response: Agree. Even though mg/kg and ug/g are synonymous, the units will be changed for consistency. Also, upon further review two other CUs, A6GAW-C15 and A6GAW-C24, have been identified as having incorrect units listed for total uranium.

Action: The units will be corrected to ug/g for CUs BSL-C02, A6GAW-C15, and A6GAW-C24. SDFPAGWASTEPITS-CERTUSEPAGEPA RICAG WP1-3-EP-CLEWLW-N AREAS CDL-PSPN STRUMEN 15, 2007 (9:37 AM) OH-2